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What kinds of value motives guide people in their moral attitudes? The role of personal and prescriptive values at the culture-level and individual-level

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Abstract

Opinions about moralized issues are arguably one of the most difficult issues in interpersonal dialogues given that they can result in intolerance and prejudicial behaviour towards those with divergent moral beliefs. Recent research has shown that moral attitudes do not only vary depending on the individual's characteristics, but also as a function of culture. Individuals from individualistic-oriented cultures exhibit more lenient judgments towards moralized issues than those from collectivistic-oriented cultures (Vauclair & Fischer, 2011). What is unclear to date is what kinds of cultural value motives underlie these attitudes – are they driven only by intrinsic value motives (personal values) or also by extrinsic value motives (prescriptive values in the form of societal expectations about what *should* be valued)? The cultural press to conform is arguably stronger if moral attitudes are predicted by the latter. Participants from eight countries ($N = 1,456$) responded to a questionnaire containing a modified version of the Schwartz Value Survey assessing personal and prescriptive values. The results showed that personal value ratings of openness-to-change vs. conservation at the culture- and individual-level were predictive of individuals' moral attitudes consistent with previous findings. Prescriptive value ratings of openness-to-change vs. conservation also predicted individuals' moral attitudes, but only at the aggregated culture-level. This suggests that the prescriptive values concept is a truly group-level phenomenon and that attitudes towards moralized issues are guided by cultural values with normative qualities. We discuss the implications for intercultural contact situations.

Keywords: Personal Values, Prescriptive Values, Cultural Values, Moral Attitudes, Cross-cultural comparisons

Abstract: 237 words; Main manuscript: 7,675 words

Opinions about moralized issues are arguably one of the most difficult issues in interpersonal dialogues given that they are perceived as objectively grounded and non-negotiable. This can result in greater intolerance and distancing from people with divergent beliefs (Skitka, Bauman, & Sargis, 2005; Wright, Cullum, & Schwab, 2008). Hence, an important question is what factors influence people's moral attitudes. Research has recently shown that individuals' moral attitudes are predicted by cultural values assessed through the subjectivist approach, i.e. country-aggregated personal importance ratings of values (Vauclair & Fischer, 2011). What is unclear to date is what kinds of cultural value motives are related to individuals' moral attitudes – are they only driven by intrinsic value motives, i.e. values that are deemed as personally preferable, or also by extrinsic value motives, i.e. values that are perceived as prescriptive within a given culture?

The problem with personal importance ratings of values is that they conflate two different motives of valuing: values may be seen as personally important because (1) they are well internalized socially desirable standards (i.e., extrinsic standards that have become intrinsic through the process of internalization), or because (2) they have just an intrinsically positive quality and are tied to a hedonic appraisal when endorsing and fulfilling this value (see also Feather, 1999; Higgins, 2006; Ryan & Deci, 2000). For instance, the value "wealth" may be judged as personally important because of its hedonic motive and not because it is an internalized socially desirable standard.

We argue that differentiating between the different value motives is crucial for a better understanding of culture and morality. All species follow some descriptive rules for behaviour,

but primates and humans also show some signs of prescriptive standards which individual group members are taught to respect through active reinforcement by others (de Waal, 1996; Haidt, 2001). In the area of human morality, where judgments of right and wrong prevail, it is conceivable that moral judgments are not only guided by personal preferences, but also by a set of values that are regarded as prescriptive in a culture. Moral psychologists adopting a relativist perspective on morality have already argued that some moral issues are culturally normative and exert social pressure upon the individual to conform (Miller, Bersoff, & Harwood, 1990; Shweder, Much, Mahapatra, & Park, 1997). Yet, the role of prescriptive values in predicting moral attitudes has not been examined to date.

If individuals' moral attitudes are predicted by cultural values that are regarded as prescriptive, people with divergent moral beliefs may experience greater social sanctions in these cultures (e.g., through physical and social distance, see Skitka, et al., 2005), than if moral attitudes are only motivated by cultural values based on personal preferences. The implication of cultural prescriptions is that they ultimately contain the expectation that others comply as well. Individuals in a culture might value 'respect for tradition', but if they do not think that others need to endorse it as well, then respect for tradition is a matter of personal taste. However, if individuals in a culture commonly regard 'respect for tradition' as a prescriptive value, then the expectation is that everyone else within society endorses this value, too. Hence, the question whether there are some values that are regarded as prescriptive in certain cultures and whether they covary with moral attitudes is undeniably highly relevant for

intercultural encounters and an important issue from a social psychological and cross-cultural perspective.

Culture and Moral Attitudes

Moral attitudes can be defined as lasting, general evaluations of rules that are seen as obligatory, universal and unalterable (cf. Turiel, 1983). For example, the moral rule 'you shall not kill' can shape the moral attitude that any types of killing, such as abortion and suicide, are wrong anywhere and anytime. How does culture relate to moral attitudes?

Cultural theories of morality (e.g., Graham, Nosek, Haidt, Iyer, Koleva, & Ditto, 2011; Shweder, et al., 1997) suggest that people from individualistic-oriented cultures tend to judge moralized issues in regard to concerns for the individual such as whether an act is unjust or unfair. On the other hand, people from collectivistic-oriented cultures judge moralized issues by taking into account whether an act might violate group concerns such as loyalty. Drawing upon this theoretical distinction, Vaclair and Fischer (2011) tested the proposition that moralized issues tapping into the domain of personal choices, regarding lifestyle issues and sexual morality (e.g., divorce, abortion), are predicted by cultural values that assess a form of individualism-collectivism. They hypothesized that issues of a personal and sexual nature should be largely disapproved in more collectivistic-oriented cultures which place the interests of the group above the individual's interests. Even if the behaviour does not cause any evident harm, it is rather judged as wrong if it is disruptive to the traditional social order and violates the definition of conservative social roles. However, the same issues should be judged more leniently in individualistic-oriented cultures in which the individual's interests are placed above

the interests of the group because people who focus on their personal rights and freedoms are sensitive to any limitations of their autonomy. Actions that do not evidently harm others, in the sense of unfair behaviours, tend to be tolerated if they serve personal goals and self-fulfillment. Possible reactions and opinions of the social group (e.g. shame and dishonour) are rather secondary in their moral consideration. Using archival data from the World Value Survey, the authors found indeed that Schwartz' (2006) cultural value orientation assessing collectivistic vs. individualistic values significantly predicted individuals' moral attitudes as hypothesized.

In the present study, we aimed to replicate this finding with novel and independent data. Replication is an important aspect for the progress of scientific research and is particularly important in the context of recent claims of non-replicability of psychological findings. Yet, we also sought to go beyond Vauclair and Fischer's (2011) study by examining whether prescriptive values are predictive of moral attitudes in order to identify the underlying value motive that drives moral attitudes.

Personal Values vs. Prescriptive Values

Individuals' personal values are usually defined as desirable, trans-situational goals, varying in importance, that serve as guiding principles in people's lives (Kluckhohn, 1952; Rokeach, 1973; Schwartz, 1992). One of the most widely used value theories in cross-cultural research is Schwartz' (1992) theory which describes individual differences in personal value endorsement. The main idea is that there are ten value types which are organized in a quasi-circumplex value system. As such, neighbouring value types in the circle are closely related in their underlying motivational goals and will most likely be endorsed in a similar fashion. However, opposite value types in the circumplex exhibit opposite underlying motivational goals

and are therefore most likely to be endorsed in opposite ways. Schwartz (1992) also proposed that the ten value types can be categorized into two higher order dimensions openness-to-change versus conservation and self-transcendence versus self-enhancement. The former assesses motivational goals of following one's own interests (individualistic focus) or the interests of the social group by preserving the status quo (collectivistic focus). Only values tapping into this dimension - which assess a form of individualistic versus collectivistic values (Kağıtçıbaşı, 1997; Fischer, Vauclair, Fontaine, & Schwartz, 2010) – have been found to be predictive of individual's moral attitudes towards personal and sexual issues (Vauclair & Fischer, 2011). Hence, our study focuses on this particular value dimension.

Prescriptive values can be defined as those that individuals feel they *should* value or are expected to value in their society. These values are perceived as group-held beliefs about what is *right* to value. Although our value approach may remind of social norms, the two are distinct in that prescriptive values refer to trans-situational guidelines (Schwartz, 1992), whereas social norms are group-held beliefs about how group members should behave in a specific context (Rokeach, 1973). Nevertheless, there are also important parallels between values and the social norms concept which helps conceptualizing prescriptive values. The social norms literature differentiates between injunctive and descriptive norms (Cialdini, 2012), the former being especially relevant to define prescriptive values. Injunctive norms refer to rules or beliefs as to what is regarded as socially approved or disapproved behaviour by a social group. Descriptive norms refer to perceptions of how the majority of group members actually behave. In other words, descriptive norms are about what people think *is* usually done, whereas injunctive norms are about what group members think *ought* to be done. Each of these norms refers to a

separate source of human motivation and is conceptually different. Cialdini (2012) argues that it is important to keep them separate in order to better understand normative influences on individuals' behaviour. In a similar vein, we argue that it is important to keep prescriptive and personal values separate in order to better understand the different motivational sources of values (extrinsic vs. intrinsic) and their influence on individuals' moral attitudes.

Prescriptive values parallel injunctive norms by referring to beliefs about what is regarded as socially approved or disapproved, but they incorporate perceptions about trans-situational motivational goals and not contextual behaviour as it is the case for norms. At the individual-level, prescriptive values are individuals' unique *perceptions* about the social expectations imposed upon them regarding their values endorsements. At the culture-level, prescriptive values indicate the shared cultural prescriptions about what should to be valued in a given culture and are indicative of the normative societal value system (cf. Schwartz, 2013).

We suggest that the distinction between personal and prescriptive values is crucial in order to understand the normative value emphases of a society's culture that individuals experience as a *cultural press* to which there are exposed (cf. Schwartz, 2013). If moral attitudes are guided by extrinsically motivated values that are perceived as prescriptive in a social group, the pressure to conform on moralized issues is arguably greater and psychologically different than for values that reflect a mere personal preference and hedonic motive in the respective culture. As for intercultural encounters, we might expect that rapprochement in moral dialogues is more difficult to achieve if moral positions are driven by cultural values that are regarded as prescriptive in the respective cultures.

Hypotheses

Following, Vauclair and Fischer's (2011) findings, we hypothesized that personal importance ratings of the value dimension openness-to-change versus conservation at the aggregated culture-level significantly predicts moral attitudes towards personal and sexual issues. Given the prescriptive nature of moralized issues (e.g., Miller, et al., 1990; Shweder, et al., 1997), we also expected that what drives moral attitudes are not values that are merely intrinsic (i.e., based on hedonic appraisal and inherent satisfaction), but those that are extrinsic or prescriptive (i.e., based on compliance as well as social rewards and sanctions) and which have been internalized and become personally important during socialization processes. Hence, the underlying value motive of Vauclair and Fischer's (2011) findings should be of a prescriptive nature. In other words, we expected that cultures in which openness-to-change values are rated as both more important and more prescriptive should be more lenient in their moral judgment of personal and sexual issues than cultures in which conservation values are more important and more prescriptive.

Consistent with Schwartz' (2013) recent theorizing, we expected that individual-level assessment of prescriptive values cannot be taken as indicators for societal value culture since individuals' value perceptions vary considerably due to differences in social experiences and democratic characteristics. Only when the values of a cultural group are averaged, the noise largely drops out and what is left in the average reflects largely the societal culture. Hence, we did not expect prescriptive values at the individual-level to be predictive of moral attitudes.

Method

Participants

Data were collected from eight countries that have been identified as individualistic-oriented (Germany, Finland, New Zealand and the United Kingdom) and collectivistic-oriented in previous research (Brazil, Japan, Turkey and the Philippines) (Hofstede, 2001; Schwartz, 2006; Triandis, 2001). A total of 1,535 university students, predominantly with a major in social sciences, participated in this study. Respondents were only included in the analysis if they identified with the country of residence as assessed in the survey, reducing the total number of individuals to 1,456 (see Table 1). The total sample size in each cultural group varied from 108 (U.K.) to 293 (Brazil). Even though gender and age balance were aimed for across cultural groups, there were significant differences in the percentages of females ($\chi^2 (7) = 24.01, p < .001$) and the average age ($F (7, 1401) = 52.00, p < .001$). The Finnish sample showed the highest percentage of females (79.6%) and the Turkish sample the lowest (57.0%). Females were in the majority in all cultural groups and made up 68% of the total sample. Respondents' average age was highest in Brazil ($M = 27.35, SD = 8.96$) and lowest in the Philippines ($M = 20.24, SD = 1.41$). The mean age of the total sample was 23.62 ($SD = 6.02$). Since age and gender have been found to be related to moral attitudes (Harding & Phillips, 1986; Vauclair & Fischer, 2011), we included these socio-demographic variables as control variables into the regression model.

Table 1 about here

Procedure

Respondents took part in the study to receive credits as part of a research participation requirement or as an in-class exercise. Participants completed the survey independently on paper and pencil. Respondents from the U.K. completed the survey online.

There were two versions of the survey (see below for more details) and each participant responded to either version 1 or 2. The two survey versions were distributed randomly to the students from each cultural sample. There was no significant difference in the sample composition regarding age ($F(1, 1407) = .09, p > .05$) and gender ($\chi^2(1) = .004, p > .05$) between the two survey versions. See Table 1 for a summary of participants' characteristics as well as mean scores on the criterion variable for each survey version and country. It took about 30 minutes on average to complete the survey.

Measures

Values. Participants rated Schwartz' values that have been found to be cross-culturally equivalent in their meaning (Schwartz, 2006). They were presented with five bipolar response scales to assess each value in regard to its personal importance, moral relevance (three different response scales), and perceived prescriptiveness in society¹. Note that for the purpose of the present study only personal and prescriptive value ratings were analyzed. To minimize participants' fatigue on this task, the value questionnaire was split into two versions. Versions 1 and 2 contained 22 and 23 value items respectively. Values were randomly selected from each of Schwartz' (1992) ten value types ensuring that all higher order value orientation were represented in each version by an approximately equal number of values. Value items were presented in alphabetical order in the survey. Given that the two survey versions differed in terms of participants and value items that index the openness-to-change vs. conservation value domain, a successful replication of the results across survey versions would point to a fairly robust finding.

Personal values (IMP ratings) (e.g., to be *helpful* is...) were rated on a 7-point bipolar response scale defined by the opposite poles 'important to me' vs. 'unimportant to me'. Responses were recoded so that higher numbers indicate greater personal importance of the value. Schwartz' (1992) higher order value orientation openness-to-change and conservation were computed by averaging the value item ratings that index the respective higher order value orientation. Since opposite value types correlate highly negatively with each other (cf. Schwartz, 2007a), a single bipolar value score was used to circumvent the problem of multicollinearity in the regression analyses: scores for conservation (negative pole of the bipolar value dimension) were subtracted from openness-to-change (positive pole of the bipolar value dimension). Hence, positive scores indicate that openness-to-change values are more personally important, whereas negative scores that conservation values are seen as more important.

Prescriptive values (EXP ratings) were rated on a 7-point bipolar response scale defined by the opposite poles 'something that I am expected to strive for in my society' vs. 'something that is my free choice to strive for in my society'. Responses were recoded so that higher numbers indicate greater perceived societal expectation of that value. A similar response scale has already been used for the measurement of injunctive norms (cf. Aijzen, Netemeyer, & Ryn, 1991; Kristiansen & Hotte, 1996; Schwartz & Tessler, 1972). We included the contextual cue 'in my society' so that individuals employ the same frame of reference when answering the value items (cf. Lievens, De Corte, & Schollaert, 2008). Prior to data collection, the response scale had been discussed in individual sessions with respondents from different cultures in regard to its comprehensibility. The bipolar value orientation openness-to-change vs. conservation was

obtained in the same way as above for personal value ratings. Positive scores indicate that openness-to-change values are more strongly perceived as a societal expectation, whereas negative scores mean that conservation values are more strongly perceived as a societal expectation in the respective society².

Recent research indicates that the individual-level value types can be used at both the individual- and country-level (Fischer & Poortinga, 2012; Fischer, Vauclair, Fontaine, & Schwartz, 2010). Therefore, in order to obtain cultural value measures, the bipolar value orientation openness-to-change vs. conservation rated as personal values or prescriptive values were aggregated at the country-level by computing the country-specific sample means. They were centred following Schwartz (2007a) procedure to correct for differences in scale use across cultural groups.

Across the two survey versions, Cronbach's alphas for openness-to-change values rated as personal values ranged from .40 to .71 (median = .50) and for conservation values from .53 to .76 (median = .68). Internal consistencies for openness-to-change values rated as prescriptive values ranged from .52 to .83 (median = .71) and for conservation values from .56 to .78 (median = .69). The issue of low reliability for openness-to-change values is somewhat attenuated when computing bipolar value orientations with the conservation values which showed somewhat better reliabilities. Nevertheless, reliabilities were in some cases considerably low, which might be due to the relatively small number of items in each of the survey versions (cf. Simms & Watson, 2007) measuring very broad constructs. Low alpha reliabilities have also been found with the PVQ which is a short version of the SVS (Schwartz, 2007b), as well as other value-related constructs (e.g., Bardi & Schwartz, 2003). Despite low

reliabilities, values were still found to predict social behavior and attitudes systematically (Schwartz, 2007b).

Moral attitudes. Five items assessing individuals' moral attitudes towards personal and sexual issues (suicide, euthanasia, prostitution, divorce, and abortion) were obtained from the Morally Debatable Behaviour Scale (MDBS, Harding & Phillips, 1986). The original response scale assesses the justifiability of personal and sexual issues and was here changed into an assessment of the 'wrongness' of the respective issues ranging from 'not wrong at all' (1) to 'extremely wrong' (5). Degrees of 'wrongness' had already been used in the Moral Behavior Scale (Crissman, 1942) which is a forerunner of the MDBS. More importantly, 'wrongness' evaluations are more likely to elicit spontaneous moral judgments that are made with respect to a set of values regarded as prescriptive in a culture (cf. Haidt, 2001).

We assessed the reliability of the slightly modified moral attitude scale by pooling respondents across the two survey versions since all participants responded to the same moral attitudinal items. A multigroup confirmatory factor analysis assessing the metric invariance of the items (i.e., whether factor loadings of the items are invariant across cultural groups) for the hypothesized one-factor model corroborated that it fitted the data well, CFI = .90, recommended level > .90, and RMSEA = .04, recommended level < .10 (see Hu & Bentler, 1999, for recommendations). The chi-square test was significant ($\chi^2(5) = 51.35, p < .001$) which is common with large sample sizes (Bentler, 1992).

Demographic variables. Respondents were asked about their age, gender, religiosity (5-point Likert scale ranging from 1 = 'not important' to 5 = 'very important') and political

orientation (7-point Likert scale ranging from 1 = 'extremely liberal' to 5 = 'extremely conservative').

Translations

The questionnaire was developed in English. Since the value items came from the SVS which has been translated into 47 languages (Schwartz, 2006), established translations were used and the values were presented in the same order as in the English version. Translations of the Morally Debatable Behaviour Scale were obtained from the World Value Survey webpage (www.worldvaluessurvey.org). The English version of the remaining parts of the questionnaire was translated into German and Portuguese by the first author and its accuracy was verified with at least one other bilingual colleague. Collaborators from Finland, Japan and Turkey translated the survey into the local language. For all translations a 'committee approach' was employed in which the translation was discussed within a group of bilinguals (Harkness, 2003). The Filipino sample received the English version, since English is one of the official languages in the Philippines.

Analytical Strategy

Multilevel regression analysis. A hierarchical regression analysis using CLOP (Cross-Level OPerator, James & Williams, 2000) was conducted to examine the association between openness-to-change vs. conservation values - rated as personally important and prescriptive at the culture- and individual-level - and individuals' moral attitudes. CLOP is a variant of multiple regression analysis that can be used to test multi-level effects if the number of clusters is too small for conventional multilevel modeling (MLM) (see, e.g., Fischer, 2008). Contextual effects are used in the analysis by assigning all participants from the same cluster the same score on

the respective contextual variable. The results of MLM and CLOP analysis are similar in terms of the estimated regression coefficients. However, CLOP does not partition variance into within- and between-unit components. Consequently, higher level predictors typically show smaller effect sizes than they would show with conventional multilevel modeling techniques because the effect of higher-level variables is used to explain total variance in the dependent variable rather than only between-unit variance as in MLM. Yet, even if these contextual effects emerge as relatively small, they are theoretically important because they should operate over a wide range of research areas and dependent variables (Liska, 1990).

Cross-validation. All analyses were first conducted with Version 1 of the survey. Data from the second version served as a cross-validation. Datasets for the two versions differed from each other in terms of participants and value items. However, participants were from the same countries across the two versions and value items were from the same higher order value orientations (openness-to-change vs. conservation).

Results

Table 2 shows the means, standard deviations and correlations of all predictors and the criterion variable for survey version 1 and 2. Although the versions were distributed randomly to participants in each cultural group, there were significant differences in religiosity ($F(1, 1290) = 84.74, p < .001$) as well as personal ($F(1, 1403) = 22.10, p < .001$) and prescriptive value ratings ($F(1, 1403) = 9.93, p < .01$). Participants from survey version 2 scored consistently higher on these variables.

The individual-level correlations between values and the criterion variable show that personal values correlate somewhat stronger with moral attitudes ($r = -.38, p < .01$) than

prescriptive values ($r = -.10, p < .05$). We verified whether the strength of the values-moral attitude associations is indeed similar for countries from the same culture cluster. In order to do so, we computed these correlations for each country and compared the two most extreme coefficients in each cluster using two-tailed tests. We found that there was no significant difference in the strength of the values-moral attitude link for the collectivistic-oriented cluster regarding personal value ratings ($Z = 1.80, p = .07$) and prescriptive value ratings ($Z = -1.46, p = .14$), nor for the individualistic-oriented culture cluster regarding personal value ratings ($Z = -0.84, p = .40$) and prescriptive value ratings ($Z = -1.79, p = .07$). This indicates that the strength of the values-moral attitude link is similar *within* each culture cluster. We will also explore whether this link is different *between* the two cultural clusters in the regression analysis reported below.

The table also shows that IMP and EXP ratings of openness-to-change vs. conservation at the country-level are highly positively correlated in both survey versions. This is a first indication that aggregated personal values and prescriptive values are somewhat similar. Hence, regarding this dimension, it seems that what a cultural group regards as personally important is also what the group commonly perceives as prescriptive. Note that IMP and EXP ratings correlated also significantly at the individual-level for Version 1, but shared not more than 0.02% of their variance and the significant association was not replicated with Version 2. Hence, there is no consistent correspondence between what individuals regard as personally important and what they perceive as a societal expectation.

Since IMP and EXP ratings were highly correlated at the country-level, it was not possible to include both predictors into the same model. We therefore ran two separate

regression models with either IMP ratings or EXP ratings of openness-to-change vs. conservation as a country-level predictor. Predictors were entered in five different blocks. Socio-demographic variables which have previously been shown to be related to moral attitudes were entered first to control for them (i.e., gender, age, political orientation and religiosity). At Step 2, the individual's response set across all values was entered as a control variable (cf. Schwartz, 2007a). This variable consisted of the individual's mean ratings (MRAT) across all values for the two response scales IMP and EXP. Including MRAT as a covariate in the regression model ensured that individual differences in the scale use were controlled for (Schwartz, 2007a). Step 3 contained values at the individual-level: openness-to-change vs. conservation rated as personally important (IMP) and Step 4 contained the same values rated as a societal expectation (EXP). Step 5 consisted of the aggregated culture-level variable openness-to-change vs. conservation, either rated as personally important (Step 5a) or as a perceived societal expectation (Step 5b).

Table 2 about here

Table 3 shows the standardized regression weights for the CLOP analyses of Survey Version 1. Respondents who were more religious and more conservative were stricter in their judgments of moral issues corroborating the findings of previous research (Harding & Phillips, 1986; Vauclair & Fischer, 2011). Yet, age and gender were here not significant predictors of moral attitudes. Adding individual's mean ratings of values (MRAT) revealed that it explained a significant amount of variance in the prediction of moral attitudes. Individuals with the tendency to score highly on their value ratings also scored highly on their moral attitude ratings, which may be a sign of individual-level acquiescence (Smith & Fischer, 2008) or a

desirability bias in value ratings as identified in previous research (Schwartz, Verkasalo, Antonovsky, & Sagiv, 1997).

Including personal value endorsement of openness-to-change vs. conservation values into the next step raised the explained variance considerably from 10% to 19%. Respondents whose personal value emphasis lies rather on openness-to-change than conservation are also more likely to report more lenient moral attitudes. We explored whether the strength of this association differed for countries coded as individualistic- and collectivistic-oriented. Adding an interaction term (cultural cluster x personal values ratings) to the regression, we found that there was no significant moderation of the values-moral attitude link by cultural cluster ($\beta = -.05, p = .67$).

Step 4 of the regression analysis showed that societal expectation ratings of openness-to-change vs. conservation were not reliably predicting moral attitudes once personal value ratings were taken into account³. Our explorative analysis again showed that there was no evidence for a significant moderation of the values-moral attitude link by cultural cluster ($\beta = .12, p = .35$).

When openness-to-change vs. conservation was added separately as a country-level predictor to the model, we found that both importance ratings of the values (Step 5a) and societal expectation ratings (Step 5b) significantly predicted moral attitudes. Individuals in cultures that put more emphasis on openness-to-change than conservation values were also more likely to exhibit more lenient moral attitudes. In a similar vein, individuals in cultures that perceived openness-to-change values as more prescriptive in their society than conservation values were also more lenient in their judgments of moral issues.

Table 3 about here

Table 4 shows the results from Version 2 of the survey. Despite the fact that there were somewhat different value items that made up the openness-to-change vs. conservation value orientation and different respondents from the eight sampled countries, all hypothesized effects were replicated. This lends support to the robustness of the finding that openness-to-change vs. conservation values rated as personally important are an important construct in the prediction of moral attitudes at the individual- and aggregated culture-level. Prescriptive assessments of these values only operate at the aggregated culture-level as a significant predictor of moral attitudes. The findings suggest that openness-to-change vs. conservation values rated as prescriptive are a truly culture-level construct assessing the cultural press that is relevant in understanding attitudes towards moralized issues.

Table 4 about here

Discussion

Summary

In this paper, we took a closer look at what kinds of value motives might drive individuals' attitudes towards highly moralized issues. We distinguished between personal values (intrinsic value motive) and prescriptive values (extrinsic value motive) – the former being assessed through conventional self-importance ratings of values and the latter through ratings regarding the perceived prescriptiveness of values. We defined prescriptive values as those that individuals think they *should* value or are expected to value in their society (cf. Hofstede, 2001; Kluckhohn, 1952). Consequently, prescriptive values at the aggregated culture-

level reflect those that are perceived by most members of a cultural group to be socially desirable.

We replicated Vauclair and Fischer's (2011) findings that self-importance ratings of values that assess a form of collectivistic versus individualistic value orientation significantly predicted individuals' moral attitudes: individuals from 'openness-to-change cultures' were more lenient in their judgment of moralized issues than individuals from 'conservation cultures'. We also showed that the effect of cultural values remained after taking into account value preferences at the individual-level which lends support to the importance of culture in understanding individual differences in moral attitudes.

We found support for our hypothesis that openness-to-change vs. conservation assessed as prescriptive values at the culture-level also significantly predicted individuals' moral attitudes: individuals from cultures in which openness-to-change values were regarded as prescriptive were more lenient in their judgment of moralized issues than individuals from cultures in which conservation values were perceived to be prescriptive.

Interestingly, openness-to-change vs. conservation rated as prescriptive values at the individual-level were not reliably related to individuals' moral attitude which suggests that these kinds of values are a truly group-level phenomenon in the area of morality. Our results can be regarded as fairly robust as they were replicated in a second cross-cultural sample with different value items indexing the openness-to-change vs. conservation value domain.

Theoretical Implications

The results elucidate in important ways how culture relates to morality. First, cultural values assessed through personal importance ratings carry some ambiguity in that they can be

valued because of two different underlying motives: They can be valued, because they are internalized socially desirable standards (i.e., extrinsic standards that have become intrinsic through the process of internalization), or because they have just an intrinsically positive quality and are tied to a hedonic appraisal when endorsing and fulfilling this value (see also Feather, 1999; Higgins, 2006; Ryan & Deci, 2000). We found that prescriptive cultural values, which carry a clear extrinsic value motive, are associated with moral attitudes in the same way as cultural values based on personal importance ratings. This indicates that the underlying value motive in the association of cultural values and moral attitudes as found in this study, as well as previous research with a large cross-cultural sample (Vauclair & Fischer, 2011), is an internalized socially desirable standard. Hence, moral attitudes are not governed by cultural values that represent merely a personal preference, but by values with normative qualities.

Our findings are highly relevant for intercultural contact situations, for example, for migrants adapting to the host culture with a different set of cultural prescriptive values compared to their home culture. After all, critical incidents in the intercultural context (Cushner & Brislin, 1996) may arise because of culturally-based expectations about how things 'ought to be' or 'ought to be done' or what kind of moral attitude one 'ought to have', and not because of personal preferences that prevail in a culture. It is likely that it is the culturally different conceptions of what is right and acceptable that carries some potential for conflict and that if violated can lead to social sanctions and upsetting experiences in intercultural encounters. Hence, migrants with divergent moral attitudes may experience a strong cultural press to conform to the prevailing moral outlook in the host culture. Future research could examine more specifically to what extent divergent positions on moralized issues are perceived as the

main barriers in intercultural rapprochement and elicit critical incidents. Linking the acculturation literature with what we know from moral psychology seems like a promising endeavor to better understand intercultural relations.

Although these implications seem to point to unsurmountable barriers between two or more cultures, we think that our results also offer some strategies for overcoming these barriers. For instance, the knowledge that moral attitudes are not only influenced by personal characteristics, but also by normative contextual factors may be used in intercultural trainings to raise awareness about what is commonly known as the fundamental attribution error (Ross, 1977), i.e. the tendency to overestimate the effect of disposition or personality and underestimate the effect of contextual factors in explaining social behaviour. Trainers may sensitize trainees about the role of cultural context in endorsing certain moral beliefs which may alleviate some of the tensions and social distance that divergent moral beliefs can create (cf. Skitka, et al., 2005; Wright et al., 2008).

Second, it is noteworthy that we found no reliable association between prescriptive value ratings of openness-to-change vs. conservation and moral attitudes at the individual-level. This illustrates the statistical independence of individual- and culture-level associations and the fact that they can carry different meanings (Liska, 1990). Drawing conclusions on the basis of findings from one level to another can result in erroneous conclusions known as the (reverse) ecological fallacy (Robinson, 1950), depending on the direction of the inference. In this case, it seems that the perceived prescriptiveness of openness-to-change vs. conservation values is a highly normative group-level phenomenon. Yet, the question remains what the non-significant individual-level finding means. We think that it supports Schwartz' (2013) recent

argument about culture as a latent normative value system which can only be assessed at the aggregated culture-level. Although, prescriptive values assessed as a societal expectation seem like an adequate operationalization of the cultural press at the individual-level, it is likely that responses are influenced by numerous unique personal characteristics (e.g., social role, personality etc.) which create considerable noise in this variable. Moreover, prescriptive values combine, to some extent, projections of own values, but especially those of a reference group. Since no two individuals are exposed to the cultural press in the same way; there are substantial individual differences in the value projections. When perceived societal expectations of a cultural sample are aggregated, the influences of unique personal characteristics cancel each other out and what is left is the societal expectations that have influenced all individuals in similar ways. Our findings provide the first empirical support for Schwartz' (2013) argument of a latent normative value system with a construct that was specifically developed to assess the perceived cultural press.

Third, the fact that openness-to-change vs. conservation values rated as prescriptive and personally important correlated highly at the culture-level is consistent with findings from previous studies. Fischer (2006) found that aggregated self- and culture-referenced ratings share a great deal of overlap for values tapping into openness-to-change and conservation value types. His explanation is that these values reflect an important value conflict that needs to be resolved early on in the socialisation process so that groups can function smoothly and individuals acquire culturally appropriate norms. It would be highly beneficial for social groups if individuals internalized these socially desirable standards as their personal values. Hence,

openness-to-change vs. conservation seems to serve an important group function which underscores its theoretical and practical importance as a predictor of moral attitudes.

Limitations

Although the two survey versions were distributed randomly to participants in each cultural group, participants from survey version 2 scored consistently higher on religiosity as well as personal and prescriptive value ratings than participants from version 1. We can only speculate what might account for these differences. It might be that in countries in which students participated in this study as an in-class exercise, one side of the classroom was randomly assigned to complete survey version 1 while the other side completed version 2. Participants sitting together are likely to be friends and therefore more similar in their attitudes and values than those sitting apart, since values and attitudes are among the most important determinants of attraction (Byrne, 1971). Given the complexity of cross-cultural research and the fact that researchers often cannot collect the data themselves, it might be desirable to develop a detailed manual for the data collection process which ensures some consistency in the procedure. Note that despite possible inconsistencies and significant differences between versions in some variables, the main results were replicated across survey versions.

By recruiting university students, the question remains whether the results are generalizable to the wider cultural population from which the students were sampled. The frame of reference was deliberately chosen as referring to the wider society assessing the 'cultural press' that applies to everyone in society. Yet, students may perceive different societal expectations, related to their social role and position in society, than the general public. The weak link between personal and prescriptive values may be due to the sampling of a student

population. Older populations, or those with a lower socio-economic status, might show stronger links between these two kinds of values because they value conformity more highly (Schwartz, 2006), and therefore may value what they think should be valued in their society. Future research will need to examine whether the results are specific for student samples or whether they can be generalized to other samples.

Contrary to previous findings (e.g., Harding & Phillips, 1986; Vauclair & Fischer, 2011), we found no significant effect of age or gender on moral attitudes. This may be because of the restricted age range and also because gender differences are less pronounced in student samples than they are in more heterogeneous samples. Nevertheless, we found that conservative political orientation and religiosity were strongly related to stricter moral attitudes – a finding that is consistent with other results in moral psychology that have primarily focused on these two variables as means to define sub-cultures (e.g., Graham, et al., 2011; Shweder, et al., 1997). It is very likely that the effect of religiosity and conservative political orientation occur because of different concerns the moralized issues tap into, i.e. purity concerns (e.g., the item on prostitution) for religious people and authority/ respect concerns (e.g., the item on divorce) for politically conservative oriented people (Graham, et al., 2011). Yet, our results make an important contribution to the literature by showing that personal values add significant variance to the prediction of moral attitudes over and above religiosity and political orientation (and even a possible response set). Moreover, the value-moral attitude link is not moderated by the cultural context. This lends support to the notion that personal values are an important individual difference variable and should be taken into account when the aim is to understand and predict moral attitudes and judgments across cultures.

It is noteworthy that the reliabilities of the broad value orientations openness-to-change and conservation assessed as personal and prescriptive values were in some cases considerably low. Measurement error may decrease the reliability of psychological measures which can be attributed to many different sources such as a small number of items or individuals' fatigue. Both of these reasons may have played a role in our case given that only half of all value items were used in each survey version and that the questionnaire consisted of repeated value ratings on different response scales. An important implication of low reliabilities is attenuation, i.e. the reduction in the size of a correlation due to measurement error. In order to estimate what the individual-level correlation between values and moral attitudes would be if all measurement error were removed from both measures, we used a correction for attenuation (for the equation, see Goodwin & Leech, 2006). We assumed a 'worst case scenario' and used the lowest alpha (.40) that we found for the broader value orientations. The individual-level correlation between openness-to-change vs. conservation in survey version 1 was -.38 (personal importance ratings) and -.10 (prescriptive value ratings) without correction for attenuation and increased to -.68 (personal value ratings) and -.18 (prescriptive value ratings) with correction for attenuation. Hence, if all measurement error was reduced, the value-moral attitude link would be much stronger for personal value ratings and would remain relatively weak (or even unchanged as we found for Survey Version 2, i.e., $r = .01$ after correction for attenuation) for prescriptive value ratings. This is consistent with our interpretation of the results that openness-to-change vs. conservation as personal values are associated with moral attitudes at the individual-level, yet the same values rated as prescriptive in society are not reliably related to moral attitudes. Hence, even if value reliabilities were considerably low in

our study, the value-moral attitudes associations were systematic, consistent with the theoretical propositions and previous empirical evidence (Vauclair & Fischer, 2011) we draw upon. Moreover, the main conclusions remain unchanged after correcting for very low reliabilities in the value measures. Our suggestion for future research is to employ the full set of value items so that reliabilities of the value orientations are not compromised due to a small number of items.

Another important limitation is the limited sample size at the country-level which did not allow us to use conventional multilevel modelling (MLM) in order to obtain unbiased standard errors. Ordinary regression analyses, such as the CLOP analyses employed here, do not take into account the clustered data structure and therefore underestimate standard errors with the consequence of overestimating the significance of the relationships. Consequently, type I errors are more likely to be committed, i.e. concluding that there is a significant relationship when in fact there is none. Hence, the question is to what extent our results are reliable. When findings are successfully replicated, we can gain greater confidence in our results. In our case, we replicated previous findings by Vauclair and Fischer (2011) and found that despite the low country-level sample size it was possible to observe the hypothesized association between cultural values and moral attitudes. This bolsters our confidence that our results are not random, but show a systematic pattern according to what we theorized.

Last not least, our survey study relied on self-reports in the assessment of the predictor and criterion variable. This method might induce common method variance (CMV; Podsakoff, MacKenzie, Lee, Podsakoff, 2003), i.e. an apparent correlation among variables that is attributable to the measurement method generated by the common source rather than to the

constructs the measures represent. For instance, correlations may emerge because respondents have a propensity to provide consistent answers to survey questions that are otherwise not related. Given that we have correlations of very different magnitudes for personal and prescriptive values with moral attitudes at the individual-level, and that personal and prescriptive values do not correlate very highly with each other, it is somewhat unlikely that CMV alone accounted for our results. Moreover, we used different response scales for the values and moral attitude measures which is one of the remedies that can be taken to reduce the likelihood of CMV. Nevertheless, the data are still based on self-reports and future research could use different sources of information for the assessment of values and moral attitudes.

Concluding Remarks

While some researchers argue to abandon the value concept because it does not take into account the social constraints and norms that are crucially important to understand cultural differences (e.g., Earley & Mosakowski, 2002; Gabrenya, 1999; Moghaddam & Studer, 1997), we think that values are a very useful concept for the study and understanding of the cultural context. We believe that the dissatisfaction with the value concept may rather be associated with the fact that value research has still not come to its full potential. The SVS is an excellent instrument to measure values and can be easily modified in its response scale to capture different kinds of values. The SVS provides a sound foundation for exploring and extending value research to enrich our understanding of cultural values. We hope that our study inspires further research into prescriptive values as an assessment of the cultural context and the role of perceived prescriptions in human morality.

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Endnotes

¹ It was anticipated that during this cognitively demanding task, participants might make mistakes. If so, these responses should be detectable as univariate outliers. Univariate outliers defined as exceeding 2.5 standard scores (cf. Hair Jr., Black, Babin, Anderson, & Tatham, 2006) were removed from the analysis on a pairwise basis (1.27% of all responses in Version 1 and 1.77% in Version 2 of the questionnaire).

² Following Schwartz' (2007) recommendation, participants with more than 30% of value responses missing were excluded listwise which constituted 3.5% of the total sample (effective sample size: $N = 1406$) and can be regarded as a small loss (Graham, 2009).

³ We also tested whether societal expectation ratings of Openness-to-change vs. Conservation at the individual-level was a significant predictor if we did not control for personal importance ratings of the same value orientation. We found that EXP ratings did predict moral attitudes in Version 1 of the survey ($\beta = -.09, p < .05$), but not in Version 2 ($\beta = -.05, p = .15$). Moreover, adding any of the country-level predictors rendered the societal expectation ratings of openness-to-change vs. conservation at the individual-level non-significant in both versions. Hence, prescriptive values were not consistently associated with moral attitudes at the individual-level.
